Monthly global update on exceptional disease events of terrestrial wildlife reported to WOAH Situation report period covered – January 2023

Wildlife co-exists alongside humans and domestic animals around the world. Each species contributes to the careful balance of the ecosystems in which they live. The health of wildlife is deeply entwined with the health of other animals, the environment and humans. By protecting wildlife health, we safeguard biodiversity and invest in a healthier, more sustainable future.

The World Organisation for Animal Health (WOAH) closely monitors the situation of select diseases in terrestrial wildlife, based on reports provided by Members. They are legally bound to provide disease information when they become members of the Organisation. This includes about 80 diseases listed by WOAH, as well as emerging diseases¹. Members can also send, on a voluntary basis, information to WOAH on relevant events for other diseases.

The objective of the monthly situation report is to provide a better visibility to exceptional disease events in wildlife for communication purposes through mandatory reporting to WOAH for listed and emerging diseases and voluntary reporting of any other relevant information². The events highlighted in this report represent exceptional changes in global disease dynamics in wildlife, that have been detected and reported by National authorities. Stable situations of wildlife diseases are not in the scope of this report. This data may have some bias, by being either incomplete or presenting variations in data granularity (depending on the Member reporting). However, it is the official global reference of animal health information reported by national authorities, using a standard template and a standard data format.

Surveillance activities in wildlife

Accurate reporting on disease situation in wildlife relies on a proper surveillance system in place at country level. National resources allocated to surveillance of diseases in wildlife is sometimes limited and this has an impact on the accuracy of the information reported. To provide background information on surveillance in wildlife and enable a better understanding of the quality and gaps in reporting, a map showing the number of diseases listed by WOAH for which surveillance is reported in wildlife among the 81 diseases listed in 2019, is provided in figure 1. In 2019, 165 Members and non-Members have reported surveillance

¹ means a new occurrence in an animal of a disease, infection or infestation, causing a significant impact on animal or public health resulting from: a) a change of a known pathogenic agent or its spread to a new geographic area or species; or b) a previously unrecognised pathogenic agent or disease diagnosed for the first time.

² Although Member Countries are only required to notify listed diseases and emerging diseases, they are encouraged to provide the OIE with other important animal health information.

activity in wildlife for at least one listed disease. On average countries report surveillance for 19 listed diseases in wildlife (minimum = 0; maximum = 81) with significant differences among and within regions.

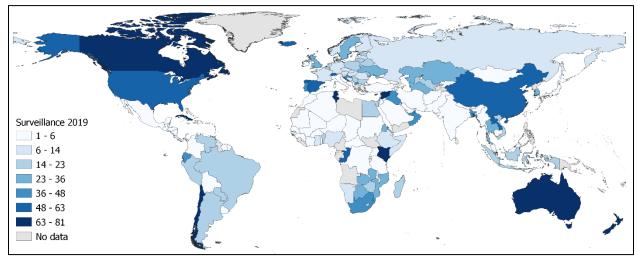


Figure 1. Number of diseases listed by WOAH for which surveillance is reported in terrestrial wildlife (data referring to situation reported by countries to WOAH in 2019 – being the most complete year for wildlife disease reporting).

Recent exceptional disease events in terrestrial wildlife (which were reported for the month covered by this report)

In total **1,340 new outbreaks** with **3,090 cases** of <u>exceptional disease events</u>³ (Figure 2) were reported in terrestrial wildlife during the month, through WOAH's early warning system.

_

 $^{^{\}rm 3}$ Based on the criteria listed in Article 1.1.3.1 of the WOAH Terrestrial Animal Health Code

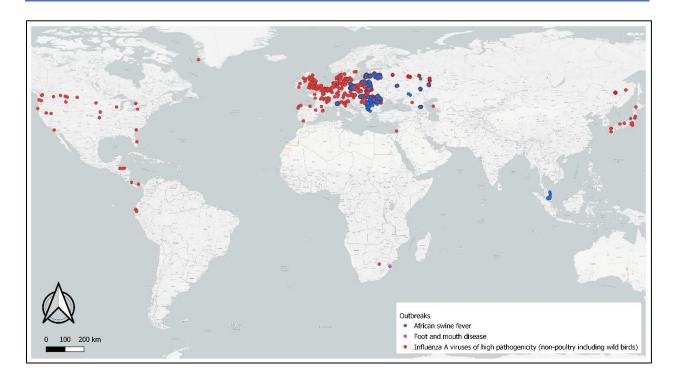


Figure 2. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife

Outbreaks were reported in countries in the Americas, Africa, Asia, Europe (Figure 3), specifically of **African** swine fever (ASF), Foot and mouth disease (FMD), and HPAI in non-poultry (HPAI). A higher density of outbreaks can be observed in the Europe Region, potentially linked to more extensive surveillance in place in wildlife. Cases have been reported in 70 different wild species belonging to 12 orders (Table 1, Table 2, and Annex 1).

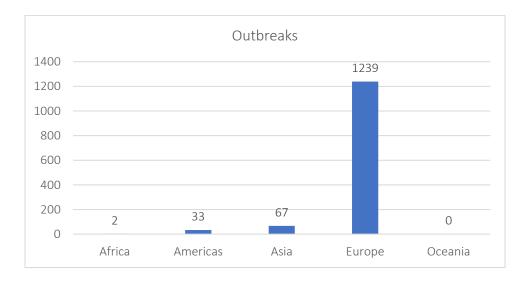


Figure 3: Number of outbreaks reported during the period and split by world region

Table 1 – Number of outbreaks reported by disease and information on zoonotic potential of the disease.

Disease	Outbreaks reported	Zoonotic disease
African swine fever	891	No
Foot and mouth disease	1	No
HPAI non-poultry	448	Yes

Table 2 - Number of cases reported by order, and animal species; conservation status of each species, based on IUCN red list of threatened species (database accessed on 9 March 2023) This table provide the list of species with threaten status. The full list of species reported is provided in annex 1.

Disease	Cases	Order	Species	Endangered status*
ASF	5	Cetartiodactyla	Sus barbatus	VU
FMD	55	Cetartiodactyla	Syncerus caffer	NT
HPAI non- poultry	1	Anseriformes	Branta sandvicensis	NT
HPAI non- poultry	566	Gruiformes	Grus monacha	VU
HPAI non- poultry	26	Gruiformes	Grus vipio	VU
HPAI non- poultry	1	Charadriiformes	Numenius arquata	NT
HPAI non- poultry	1	Carnivora	Panthera tigris	EN
HPAI non- poultry	1	Accipitriformes	Sagittarius serpentarius	EN
HPAI non- poultry	1	Anseriformes	Somateria mollissima	NT

^{*}NT=Near threatened; VU=vulnerable; EN: endangered

Global and regional impact

Reporting and impact on biodiversity

Out of the 70 species for which cases were reported, 9 of them (13%) have a threaten status according to the IUCN classification. In particular, four are classified as "Near threaten" (NT), three as "Vulnerable" (VU), and two as "Endangered" (EN) (figure 4). All the three reported diseases impacted at least on one species with threaten status, highlighting the impact of animal diseases on biodiversity conservation.

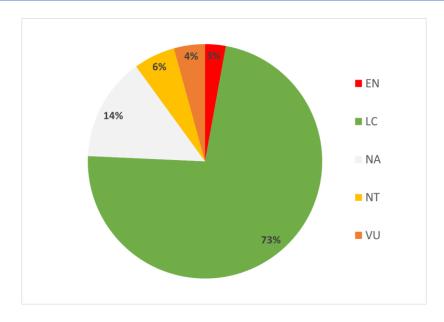


Figure 4: percentage of reported species falling under the different IUCN categories

In particular, regarding the species with endangered status, the Tiger, *Panthera tigris* has a global estimated population of 3,726 and 5,578 individuals that is constantly declining. This population estimate is the first reasonably rigorous census of worldwide Tiger populations, based on capture-recapture and occupancy methodologies. Based on IUCN definitions of mature individuals, this gives an estimated range of between 2,608 and 3,905 mature individuals, with a best estimate of 3,140⁴. The dead tiger in this case was a captive wild animals from the United States of America.

On the other hand, the Secretary bird, *Sagittarius serpentarius* has a global population estimation ranging from 6,700 to 67,000 individuals. The Sahel region of Mali, Niger, and Burkina Faso, Cameroon, Kenya, Botswana, Estwatini and South Africa have all seen significant decline in their populations. The species is thought to be rapidly declining⁵.

The Hooded crane, *Grus monacca* is ranked as vulnerable by IUCN with an estimated population size of 6000-15000 individuals⁶. With 566 individuals affected by AI, the toll of the disease on this species can be considered as significant (4 to 9% of the population died).

⁴ https://www.iucnredlist.org/species/15955/214862019

⁵ https://www.iucnredlist.org/species/22696221/173647556

⁶ Grus monacha (Hooded Crane) (iucnredlist.org) acceded on 14/03/2023

Although not affecting endangered wild species in this report, African Swine fever could potentially threaten endemic wild pig species and lead to local population extinction, and cause generate tension for top predators that rely on wild boar as a main source of food.

Reporting and impact on Public health

Among the disease reported this month, only HPAI has a zoonotic potential. In particular, the report of HPAI cases in "unusual hosts" (*Lynx rufus*, *Mephitis mephitis*, *Panthera tigris*, *Procyon lotor*, *Puma concolor*, *Ursus arctos*, *Vulpes vulpes*), highlights the increased risk of transmission to mammals (including humans). This confirms a trend (increased number of HPAI cases reported in unusual hosts) observed since 2021 (for additional information please see also the <u>Highly pathogenic avian influenza situation reports</u>). This trend has led to a statement of WOAH on avian influenza in mammals to increase awareness, monitoring and analysis of wild mammals⁷.

Reporting and impact on domestic animal's health and welfare

During the period most of the outbreaks of non-zoonotic diseases reported were related to the occurrence of African swine fever in wild boar in Europe. African swine fever represents one of the main animal diseases that threaten to livestock and food security at global level (for additional information please see also the African swine fever situation reports). The major impact of African swine fever is linked to the establishment of a wildlife cycle that makes disease eradication challenging. Reduction of wild boar density may have indirect effects also on increase predation of livestock⁸.

Regarding the occurrence of HPAI it is relevant to highlight also in this case the dynamics of the disease at the poultry/wildlife interface with impacts on food security, and biodiversity conservation, (for additional information please see also the Highly pathogenic avian influenza situation reports).

Key messages

For a century, WOAH has managed repositories for animal health disease monitoring data from its Members. By providing a common tool through the World Animal Health Information System (WAHIS), that is homogenous across countries, and founded on a basis of shared definitions and standards, we ensure that reporting is standardised and centralised. The information provided in this report on surveillance implementation in terrestrial wildlife shows major gaps in several parts of the world, which suggests that

⁷ Statement on avian influenza and mammals - World Organisation for Animal Health (woah.org)

⁸ https://www.sciencedirect.com/science/article/pii/S1470160X21010840

the number of cases reported to WOAH is significantly under-detected and underestimated. This summary however provides a picture of what has been detected and is useful to the international community.

The information provided in this monthly situation report highlights that:

- Surveillance activities reported in wildlife is largely variable among countries and regions.
- The reporting of exceptional events affecting wildlife in January concerned mainly ASF and HPAI in several regions.
- Several countries reported outbreaks for ASF and HPAI, which shows the widespread existence of surveillance activities for these two diseases.
- Several species with critical conservation status have been reported by countries, highlighting the importance of sharing this information for disease events that can threaten the conservation of biodiversity.
- The widespread detection of ASF and HPAI in wildlife represent a threat to livestock and food security at global level.

More information and resources

- Statement on avian influenza and mammals
- African swine fever in wild boar ecology and biosecurity
- <u>Take action</u>
- General resources
- <u>Join our World Wildlife Day Webinar on March 3</u> (register here)

For any press inquiry on diseases in wildlife, you can email us at media@woah.org

Annex 1

Complete list of species for which cases were reported in January 2023. The number of cases are reported by order, and animal species; conservation status of each species, based on IUCN red list of threatened species (database accessed on 9 March 2023).

Disease	Cases	Order	Species	Endangered status*
ASF	5	Cetartiodactyla	Sus barbatus	VU
ASF	1314	Cetartiodactyla	Sus scrofa	LC
FMD	55	Cetartiodactyla	Syncerus caffer	NT
HPAI	1	Accipitriformes	Accipiter gentilis	LC
HPAI non- poultry	4	Accipitriformes	Accipiter nisus	LC
HPAI non- poultry	5	Accipitriformes	Accipitridae (unidentified)	NA
HPAI non- poultry	2	NA	Species unknown	NA
HPAI non- poultry	5	Anseriformes	Alopochen aegyptiaca	LC
HPAI non- poultry	2	Anseriformes	Anas acuta	LC
HPAI non- poultry	4	Anseriformes	Anas penelope	LC
HPAI non- poultry	14	Anseriformes	Anas platyrhynchos	LC
HPAI non- poultry	51	Anseriformes	Anatidae (unidentified)	NA
HPAI non- poultry	6	Anseriformes	Anser albifrons	LC
HPAI non- poultry	85	Anseriformes	Anser anser	LC
HPAI non- poultry	21	Anseriformes	Anser brachyrhynchus	LC
HPAI non- poultry	3	Anseriformes	Anser fabalis	LC
HPAI non- poultry	19	Anseriformes	Anserinae (unidentified)	NA
HPAI non- poultry	4	Pelecaniformes	Ardea alba	LC
HPAI non- poultry	10	Pelecaniformes	Ardea cinerea	LC
HPAI non- poultry	4	Pelecaniformes	Ardeidae (unidentified)	NA

Disease	Cases	Order	Species	Endangered status*
HPAI non- poultry	3	Anseriformes	Branta bernicla	LC
HPAI non- poultry	46	Anseriformes	Branta canadensis	LC
HPAI non- poultry	21	Anseriformes	Branta leucopsis	LC
HPAI non- poultry	1	Anseriformes	Branta sandvicensis	NT
HPAI non- poultry	3	Pelecaniformes	Bubulcus ibis	LC
HPAI non- poultry	1	Anseriformes	Bucephala albeola	LC
HPAI non- poultry	1	Anseriformes	Bucephala clangula	LC
HPAI non- poultry	35	Accipitriformes	Buteo buteo	LC
HPAI non- poultry	1	Accipitriformes	Buteo japonicus	LC
HPAI non- poultry	212	Charadriiformes	Chroicocephalus ridibundus	LC
HPAI non- poultry	1	Columbiformes	Columba livia	LC
HPAI non- poultry	4	Passeriformes	Corvidae (unidentified)	NA
HPAI non- poultry	1	Passeriformes	Corvus corax	LC
HPAI non- poultry	3	Passeriformes	Corvus macrorhynchos	LC
HPAI non- poultry	10	Anseriformes	Cygnus (unidentified)	NA
HPAI non- poultry	34	Anseriformes	Cygnus cygnus	LC
HPAI non- poultry	175	Anseriformes	Cygnus olor	LC
HPAI non- poultry	2	Pelecaniformes	Egretta caerulea	LC
HPAI non- poultry	3	Pelecaniformes	Egretta garzetta	LC
HPAI non- poultry	15	Falconiformes	Falco peregrinus	LC
HPAI non- poultry	1	Falconiformes	Falco sparverius	LC
HPAI non- poultry	2	Falconiformes	Falco tinnunculus	LC

Disease	Cases	Order	Species	Endangered status*
HPAI non- poultry	1	Gruiformes	Gallinula chloropus	LC
HPAI non- poultry	1	Gaviiformes	Gavia stellata	LC
HPAI non- poultry	566	Gruiformes	Grus monacha	VU
HPAI non- poultry	26	Gruiformes	Grus vipio	VU
HPAI non- poultry	12	Charadriiformes	Laridae (unidentified)	NA
HPAI non- poultry	14	Charadriiformes	Larus argentatus	LC
HPAI non- poultry	2	Charadriiformes	Larus cachinnans	LC
HPAI non- poultry	3	Charadriiformes	Larus fuscus	LC
HPAI non- poultry	4	Charadriiformes	Larus michahellis	LC
HPAI non- poultry	1	Charadriiformes	Larus novaehollandiae	LC
HPAI non- poultry	1	Carnivora	Lynx rufus	LC
HPAI non- poultry	7	Carnivora	Mephitis mephitis	LC
HPAI non- poultry	1	Anseriformes	Mergus merganser	LC
HPAI non- poultry	1	Charadriiformes	Numenius arquata	NT
HPAI non- poultry	1	Carnivora	Panthera tigris	EN
HPAI non- poultry	196	Pelecaniformes	Pelecanus occidentalis	LC
HPAI non- poultry	2	Suliformes	Phalacrocorax carbo	LC
HPAI non- poultry	40	Galliformes	Phasianidae (incognita)	NA
HPAI non- poultry	2	Carnivora	Procyon lotor	LC
HPAI non- poultry	6	Psittaciformes	Psittacidae (incognita)	NA
HPAI non- poultry	1	Carnivora	Puma concolor	LC
HPAI non- poultry	1	Accipitriformes	Sagittarius serpentarius	EN

Disease	Cases	Order	Species	Endangered status*
HPAI non- poultry	1	Charadriiformes	Scolopacidae (incognita)	NA
HPAI non- poultry	1	Anseriformes	Somateria mollissima	NT
HPAI non- poultry	1	Suliformes	Sula nebouxii	LC
HPAI non- poultry	2	Charadriiformes	Uria aalge	LC
HPAI non- poultry	4	Carnivora	Ursus arctos	LC
HPAI non- poultry	3	Carnivora	Vulpes vulpes	LC

^{*&}lt;mark>LC= Least concern</mark>; <mark>NT=Near threatened</mark>; <mark>VU=vulnerable</mark>; <mark>EN: endangered</mark>